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In cooperation with State, Federal and Other Agencies

COTTON INSECT CONDITIONS FOR WEEK ENDING AUGUST 13, 1948
(Thirteenth Cotton Insect Survey Report for 1948)

No shortages of insecticides for cotton insect control have been reported this season.

Cotton leafworms were reported in Cameron, McLennan, and Falls Counties, Texas, making a total of eleven counties found infested in Texas this season. Since most of the cotton in the central and northern areas of the State is mature, it appears unlikely that leafworms will build up in sufficient numbers to cause damage, except in a few late-fruiting fields. Cotton leafworms have been previously reported from three counties in Florida, but due to the maturity of the cotton crop no damage is expected.

Bollworms are causing serious damage in many late-planted, succulent cotton fields in Texas and Oklahoma. Many growers are dusting and much cotton can be saved by the proper use of insecticides.

The spring emergence of boll weevils was below normal in many sections of the cotton belt but sufficient weevils emerged and entered cotton fields to have caused serious damage in most weevil infested States had conditions been favorable for their development. Applications of insecticides and unfavorable climatic conditions especially hot, dry weather during the latter part of June and July held weevil infestations in check, except in favorable situations. As a result serious boll weevil infestations were generally spotted. Much of the cotton is now so far advanced that control measures will not be necessary but late cotton may still need protection.

Other than a general summary at the end of the season this will be the last report on cotton insect conditions for 1948 unless some unforeseen insect condition arises.

BOLL WEEVIL

TEXAS: Continued hot, dry weather in most central and northern counties has had its effect in reducing boll weevil populations. However, weevils continue to cause medium to heavy damage in a number of fields throughout these areas. Some fields of late-fruiting cotton continue to need protection against weevils. The average infestation in 303 fields in 32 counties was 16% punctured squares as compared to 22% the past week. No punctured squares were found in 54 of the fields examined. In 175 fields less than 25% of the squares were punctured; in 41 fields from 26 to 50%; and in 33 fields more than 50%of the squares were punctured.

OKLAHOMA: Cotton made fair progress during the week, especially in the western half of the State but the crop is maturing rapidly in the southern counties. Boll weevils are very abundant in the eastern and southern sections of the State. Weevils are now migrating from field to field in large numbers. The average infestation in 128 fields in 18 counties was 40% punctured squares as compared to 34% last week. No weevils were found in 1 field in Stephens County. In 50 fields less than 25% of the squares were punctured; in 28 fields from 26 to 50%; and in 49 fields more than 50% of the squares were punctured.

LOUISIANA: "Cotton has matured very rapidly in Caddo and Bossier Parishes during the first ten days of August, and some picking has been in progress for two weeks. Picking will become general over the area during the week of August 16. High yields are expected. Local migrations of the boll weevil apparently took place in a few fields during the first week of August. There are still no indications of a general migration, and in view of the small total population no large general movement of the boll weevil is expected before the crop is entirely out of danger. Insect damage during the season has been light comparing closely to that of 1947. In spite of the low infestations generally, a considerable amount of unnecessary dusting has been done. Dusting is in progress in some fields at present for the protection of young bolls, and insecticides are also being applied in a few fields for bollworm control." (L. D. Newsom, Aug. 13)

The 10.23 inches of rainfall at Tallulah on August 9 interfered with experimental and commercial dusting for boll protection in Madison and East Carroll Parishes. The average infestation in 32 fields in Madison Parish was 44% punctured squares. The infestations ranged from 16 to 86%. Most all cotton fields have now passed the stage of being attractive to insects.

ARKANSAS: "Migration of boll weevils is in full swing. Any cotton made from now on in western Arkansas will be made by dusting. The infestation is less widespread in eastern Arkansas. There are considerable areas in the Delta in southeastern Arkansas where dusting is needed to protect small bolls and to finish making the crop. There are no weevils in the Delta north of the Arkansas River except in a few favorable situations. Many fields have matured their crop and no dusting is needed." (Charles Lincoln, Aug. 11)

The average infestation in 32 fields in 6 southeastern counties was 19% punctured squares. In Chicot County, the infestation increased during the week from 29 to 41% punctured squares. The infestations in most of the remaining counties in the southeastern section of the State remained low.

MISSISSIPPI: Rains and cloudy weather were favorable for weevil development and the cotton crop. Weevil activity is increasing in late planted cotton fields and insecticides are being applied in many fields to protect young bolls. Reports indicate that migrating weevils still have not reached all parts of the Delta. On account of rain and muddy fields only 233 fields were examined in 12 Delta counties during the week. The average infestation in 136 infested fields was 25%. No punctured squares were found in 79 fields; in 85 fields less than 25% of the squares were punctured; in 33 fields from 26 to 50%; and in 18 fields more than 50% of the squares were punctured. B. J. Young, Delta and Pine Land Co. in the southern part of Bolivar County, reported punctured squares in 233 of the 234 fields examined. Mr. Young stated: "Weevil infestation has increased very rapidly during the past week and the daily rains have made poisoning a difficult problem. Considerable poison has been lost as a result of the rains. Apparently, control of the boll weevil is the main problem, as no other insects have been reported in sufficient numbers to cause damage."

GEORGIA: In general, weather conditions have been favorable for cotton except in the Coastal Plain where hot, dry weather is needed to open the bolls. In the southwestern Piedmont area the major portion of the crop is mature and beyond the stage of insect damage. The average infestation in 23 fields in 6 counties in this area was 18% punctured squares. In 9 fields the infestation was less than 10%; in 13 fields from 11 to 50%; and in only 1 field in Douglas County were more than 50% of the squares punctured. In 32 fields examined in 8 north central Piedmont counties less than 25% of the squares were punctured; in 32 fields in 9 northeast Piedmont counties less than 25% of the squares were punctured; and in 4 fields in Hart, McDuffie, and Warren Counties more than 25% of the squares were punctured.

SOUTH CAROLINA: Cotton in the Piedmont area is still fruiting, while in the Coastal Plains area most all cotton is mature and picking is becoming general. Near the Pee Dee Experiment Station 79 weevils were collected from a screen trap as compared to 32 last week. Migrating weevils have now invaded most all fields in the Piedmont area and much cotton can be saved by the use of insecticides to protect the bolls from weevil damage. The infestation in 57 fields in 16 Piedmont counties was 76% punctured squares as compared to 49% a year ago at this time. In 11 fields the infestation was less than 50%, and in 46 fields more than 50% of the squares were punctured.

NORTH CAROLINA: In general, dry weather prevailed over most sections of the cotton belt and cotton is maturing rapidly. Picking will be well under way in the southern counties next week. Boll weevil migration is now general. Very few fields have squares and heavy damage to young bolls is to be expected. All immature cotton fields should be dusted with insecticides at 4- or 5-day intervals until the bolls are mature and beyond the stage of boll weevil damage.

VIRGINIA: Boll weevil punctured squares were found in all 5 fields examined near Holland. In 2 of the fields 37% and 38% of the squares were punctured. (W. Don Fronk, Aug. 14)

COTTON FLEAHOPPER, TARNISHED PLANT BUG, RAPID PLANT BUG, AND OTHER MIRIDAE

TEXAS: No reports of cotton fleahopper damage were received. The average infestation in 364 fields in 36 counties was 8 fleahoppers per 100 terminals as compared to 10 the previous week. Due to the maturity of the crop no serious damage is expected.

OKLAHOMA: Cotton fleahopper infestations increased in Jefferson, Love, McClain and Pottawatomie Counties but no serious damage was reported. The average infestation in 126 fields examined in 18 counties was 6 fleahoppers per 100 terminals as compared to 5 last week.

LOUISIANA: "The tarnished plant bug and rapid plant bug persisted in many fields in Caddo and Bossier Parishes through July, and the latter has increased markedly during the last month. A considerable number of last instar nymphs and adults of both species are present in a few fields now." (L. D. Newsom, Aug. 13)

MISSISSIPPI: Cotton fleahoppers were reported in only 1 of 233 fields examined in 12 Delta counties. The rapid plant bug was reported in 44 fields and the tarnished plant bug was reported in 20 fields.

BOLLWORM

TEXAS: Bollwroms continue to cause serious damage in late fruiting cotton fields in central Texas. In the examination of 9700 terminals in McLennan and Falls Counties an average of 13 eggs and 6 larvae were found per 100 terminals. Bollworm injured squares averaged 10% in the 21 fields inspected. Much cotton can be saved in young, succulent cotton fields from the proper use of insecticides.

OKLAHOMA: "Bollworms are very numerous throughout much of the State and have caused serious damage in some fields from the Kansas border to the Red River and at Mountainview." (C. F. Stiles, Aug. 14).

LOUISIANA: "Eggs of the destructive generation of bollworm began appearing in large numbers in cotton fields in Caddo and Bossier Parishes during the last week of July 16. Although large numbers of eggs were observed in many fields few damaging infestations occurred. This generation seems to have passed its peak and much of the cotton has reached the stage where it is no longer attractive to the ovipositing moths." (L. D. Newsom, Aug. 13)

ARKANSAS: "Eggs and small bollworms are common in some fields and there may be local outbreaks. This is the bollworm season and cotton should be carefully scouted for the next two weeks. Observations on silking corn and on cotton indicate that the population of bollworms (corn earworms) is smaller than usual for this time of year." (Charles Lincoln, Aug. 11)

MISSISSIPPI: Bollworm damage was reported in only 6 of 234 cotton fields examined in 12 Delta counties.

GEORGIA: Bollworms have not appeared in damaging numbers on cotton in the State this season.

SOUTH CAROLINA: There are still very few bollworms on cotton in the State.

NORTH CAROLINA: Lepidopterous larvae in cotton bolls are on the increase, especially in the middle Coastal Plain.

COTTON LEAFWORM

TEXAS: Cotton leafworm infestations were reported in Cameron, McLennan and Falls Counties during the week. They have been previously reported in 8 counties.

FLORIDA: No additional counties were reported with cotton leafworms during the week. They have been previously reported from 3 counties.

MISCELLANEOUS INSECTS

TEXAS: Grasshoppers are still causing damage in some areas.

LOUISIANA: Cotton aphid infestations are increasing in some cotton fields in the northwestern part of the State that have been dusted for weevil and bollworm control, but no serious damage has been observed.

ARKANSAS: "No outbreaks of aphids as a result of dusting have been reported." (Charles Lincoln, Aug. 11)

MISSISSIPPI: Heavy rains accompanied by strong winds have greatly reduced cotton aphid populations in many Delta fields. In the examination of 233 fields only 18 were reported infested.

SOUTH CAROLINA: Only a few light scattered infestations of red spider and cotton aphids have been reported.

NORTH CAROLINA: "Red spiders are causing heavy damage in many late planted fields though in earlier fields cotton is far enough along to get by without injury in most cases." (James T. Conner, Jr., Aug. 14)

INSECTS ON IRRIGATED COTTON OF THE SOUTHWEST

ARIZONA: Injurious hemipterous insect populations increased in many cotton fields throughout the Salt River Valley during the week. An increase in bollworms was also noted. In the Buckeye area many cotton fields are being dusted for their control. In the Paloverde area some of the cotton fields infested with bollworms were sprayed using airplanes. In general large acreages of cotton continue to be dusted or sprayed for cotton insect control in the Valley. Bollworms continue to be the major insect problem in the Santa Cruz Valley. Practically the entire cotton acreage has been dusted for bollworm control with good results. Aphids are now becoming numerous in the Marana area. General dusting is under way in the Safford Valley for *Lygus* and superb plant bugs. The crop dusters are behind in their schedule and more planes are needed. In Cochise County bollworms have become serious in the Elfrida district and arrangements are being made to dust for their control. Many fields are being dusted in the Willcox area for hemipterous insects.

TEXAS: Hemipterous insect populations continue to increase in cotton fields that have not been dusted in the El Paso Valley. Bollworms are causing some concern but no serious infestations have been reported.

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